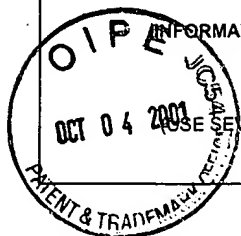


FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
UOFMD.006AAPPLICATION NO.  
09/839,894INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT  
Altboum et al.FILING DATE  
April 20, 2001GROUP  
Unknown

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
2L	1	4,946,778	08/07/90	Ladner et al.			
2L	2	6,110,898	08/29/00	Malone et al.			
2L	3	6,187,344	02/13/01	Eljamal et al.			
2L	4	6,190,669	02/20/01	Noriega et al.			

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

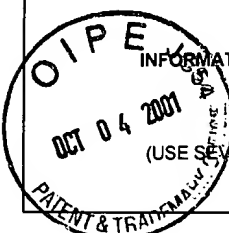
## OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
2L	5	Altboum et al. (2001) Attenuated <i>Shigella flexneri</i> 2a ΔguaBA strain CVD 1204 expressing enterotoxigenic <i>Escherichia coli</i> (ETEC) CS2 and CS3 fimbriae as a live mucosal vaccine against shigella and ETEC infection. <i>Infection and Immunity</i> . 69(5):3150-3158.
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2L	10	Chang et al. (1978) Phenotypic expression in <i>E. coli</i> of a DNA sequence coding for mouse dihydrofolate reductase. <i>Nature</i> . 275:617-624.
2L	11	Cote, et al. (1983) Generation of human monoclonal antibodies reactive with cellular antigens. <i>Proc.Natl.Acad.Sci.</i> 80:2026-2030.
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2L	19	Froehlich et al. (1994) CooC and CooD are required for assembly of CS1 pili. <i>Molecular Microbiology</i> . 12(3):387-401.

EXAMINER


DATE CONSIDERED

\*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. UOFMD.006A	APPLICATION NO. 09/839,894
 <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)</p>		APPLICANT Altbaum et al.	
		FILING DATE April 20, 2001	GROUP Unknown

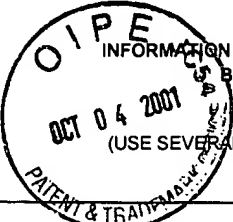
EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
2L	20 Froehlich et al. (1995) Genes for CS2 pili of enterotoxigenic <i>Escherichia coli</i> and their interchangeability with those for CS1 pili. <i>Infection and Immunity</i> . 63(12):4849-4856.
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2L	24 Goeddel et al. (1980) Synthesis of human fibroblast interferon by <i>E. coli</i> . <i>Nucleic Acids Research</i> . 8(18):4057-4075.
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2L	27 Hamers et al. (1989) The nucleotide sequence of the first two genes of the CFA/I fimbrial operon of human enterotoxigenic <i>Escherichia coli</i> . <i>Microbial Pathogenesis</i> . 6:297-309.
2L	28 Hitzeman, et al. (1980) Isolation and characterization of the yeast 3-phosphoglycerokinase gene (PGK) by an immunological screening technique. <i>The Journal of Biological Chemistry</i> . 255(24):12073-12080.
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2L	30 Huse, et al. (1989) Generation of a large combinatorial library of the immunoglobulin repertoire in phage lambda. <i>Science</i> . 246:1275-1281.
2L	31 Hyams et al. (1991) Diarrheal disease during operating desert shield. <i>The New England Journal of Medicine</i> . 325(20):1423-1428.
2L	32 Jalajakumari, et al. (1989) Genes for biosynthesis and assembly of CS3 pili of CFA/II enterotoxigenic <i>Escherichia coli</i> : novel regulation of pilus production by bypassing an amber codon. <i>Molecular Microbiology</i> . 3(12):1685-1695.
2L	33 Jaye et al. (1983) Isolation of a human anti-haemophilic factor IX cDNA clone using a unique 52-base synthetic oligonucleotide probe deduced from the amino acid sequence of bovine factor IX. <i>Nucleic Acids Research</i> . 11(8):2325-2335.
2L	34 Jertborn et al. (1998) Safety and immunogenicity of an oral inactivated enterotoxigenic <i>Escherichia coli</i> vaccine. <i>Vaccine</i> . 16(2/3):255-260.
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2L	36 Kohler et al. (1975) Continuous cultures of fused cells secreting antibody of predefined specificity. <i>Nature</i> 256:495-497.
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2L	40 Levine, M.M. (1987) <i>Escherichia coli</i> that cause diarrhea: enterotoxigenic, enteropathogenic, enteroinvasive, enterohemorrhagic, and enteroadherent. <i>The Journal of Infectious Diseases</i> . 377-389.
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EXAMINER <i>[Signature]</i>	DATE CONSIDERED <i>7-18-2002</i>
<p>*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.</p>	

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		APPLICANT Altboum et al.	
		FILING DATE April 20, 2001	GROUP Unknown

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
2L	46	McConnell et al. (1989) Antigenic homology within human enterotoxigenic <i>Escherichia coli</i> fimbrial colonization factor antigens: CFA/I, coli-surface-associated antigens (CS)1, CS2, CS4 and CS17. FEMS Microbiology Letters 61: 105-108.
2L	47	McConnell et al. (1991) Surveys of human enterotoxigenic <i>Escherichia coli</i> from three different geographical areas for possible colonization factors. Epidemiol.Infect. 106:477-484.
2L	48	Merson et al. (1976) Travelers' diarrhea in Mexico. A prospective study of physicians and family members attending a congress. The New England Journal of Medicine. 294(24):1299-1305.
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2L	50	Morrison et al. (1984) Chimeric human antibody molecules: mouse antigen-binding domains with human constant region domains. Proc.Natl.Acad.Sci. 81:6851-6855.
2L	51	Neuberger et al. (1984) Recombinant antibodies possessing novel effector functions. Nature. 312:604-608.
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2L	62	Sommerfelt et al. (1991) Presence of cfaD-homologous sequences and expression of coli surface antigen 4 on enterotoxigenic <i>Escherichia coli</i> ; relevance for diagnostic procedures. Microbial Pathogenesis. 11:297-304.
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2L	66	Takeda et al. (1985) Construction of chimaeric processed immunoglobulin genes containing mouse variable and human constant region sequences. Nature. 314:452-454.
2L	67	Thomas et al. (1985) The possession of three novel coli surface antigens by enterotoxigenic <i>Escherichia coli</i> strains positive for the putative colonization factor PCF 8775. Journal of General Microbiology. 131:2319-2326.
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2L	69	Viboud et al. (1996) Binding of enterotoxigenic <i>Escherichia coli</i> expressing different colonization factors to tissue-cultured caco-2 cells and to isolated human enterocytes. Microbial Pathogenesis. 21:139-147.
2L	70	Wallace et al. (1981) The use of synthetic oligonucleotides as hybridization probes. Nucleic Acids Research. 9:879-895.
2L	71	Willshaw et al. (1988) Cloning of genes encoding coli-surface (CS) antigens in enterotoxigenic <i>Escherichia coli</i> . FEMS Microbiology Letters 49. 473-478.

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	APPLICANT Altboum et al.	
	FILING DATE April 20, 2001	GROUP Unknown

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
ZC	72	Willshaw et al. (1990) Structural and regulatory genes for coli surface associated antigen 4(CS4) are encoded by separate plasmids in enterotoxigenic <i>Escherichia coli</i> strains of serotype 025.H42. FEMS Microbiology Letters 68. 255-260.
ZC	73	Willshaw et al. (1991) Cloning of regulator genes controlling fimbrial production by enterotoxigenic <i>Escherichia coli</i> . FEMS Microbiology Letters 82. 125-130.
ZC	74	Winter, et al. (1991) Man-made antibodies. Nature. 349:293-299,
ZC	75	Wolf et al. (1989) Characterization of CS4 and CS6 antigenic components of PCF8775, a putative colonization factor complex from enterotoxigenic <i>Escherichia coli</i> E8775. Infection and Immunity. 57(1):164-173.
ZC	76	Wolf, et al. (1997) The CS6 colonization factor of human enterotoxigenic <i>Escherichia coli</i> contains two heterologous major subunits. FEMS Microbiology Letters. 148:35-42.

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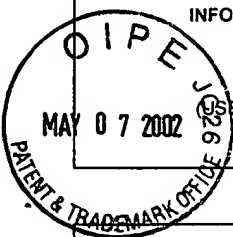
EXAMINER <i>Garrett</i>	DATE CONSIDERED <i>7-18-2002</i>
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Altboum et al.FILING DATE  
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## U.S. PATENT DOCUMENTS

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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
2L	1	WO 96 38171	12/5/96					

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)		
2L	2	Altboum Z et al., <i>Construction of a Bivalent Shigella-ETEC Vaccine Expressing CS2 and CS3 Pili</i> , ABSTRACT OF THE GENERAL MEETING OF THE AMERICAN SOCIETY FOR, Vol. 99, 1999, page 293, 99 <sup>th</sup> General Meeting of the American Society for Microbiology; Chicago, IL	
2L	3	Altboum Z et al., <i>Construction of a Bivalent Shigella-ETEC Vaccine Expressing CS4 Pili</i> , ABSTRACT OF THE GENERAL MEETING OF THE AMERICAN SOCIETY FOR, Vol. 100, 2000, page 303, 100 <sup>th</sup> General Meeting of the American Society for Microbiology; Los Angeles, CA	
2L	4	Koprowski H II et al., <i>Construction and Analysis of a Shigella Flexneri 2a/CFA/I Vaccine</i> , Abstracts of the General Meeting of the American Society For, Vol. 99, 1999, p. 293, 99 <sup>th</sup> General Meeting of the American Society for Microbiology; Chicago, IL.	
2L	5	Pilsel Holger et al., <i>Characterization of Colicin S4 and its Receptor, OmpW, a minor protein of the Escherichia Coli outer membrane.</i> , Journal of Bacteriology, Vol. 181, No. 11, June 1999, pp. 3578-3581.	
2L	6	DATABASE EBI "online", Hinxton, UK; May 7, 1996, Van Dijk	

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